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Conference Abstract

The New EU Artificial Intelligence Act: Impact on the Biodiversity Information Community

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Abstract

In February 2024, the European Union (EU) endorsed the AI Act, launched the new European Artificial Intelligence Office and initiated the program Generative AI for the EU (GenAI4EU, Fig. 1). This legislation governs how AI is developed, deployed and used in Europe. The obligations will incrementally become mandatory until 2030. While the Act was primarily designed to identify and protect humans from risks of manipulation and illicit use of AI, it will not be without impact on the biodiversity community. AI in our domain will mostly be ranked as no-to-low risk (Fig. 2). However, we will have to adhere to the transparency requirements and be particularly attentive when combining AI with citizen science initiatives affecting potentially the general public or for example, if projects concern illegal trafficking of species and border control. A further point of attention with our worldwide scope, is that non-European AI initiatives or tools allowed to be deployed or used in Europe will have to commit to follow both the AI Act and the GDPR (General Data Protection Regulation) and have a reference person or institution with a legal address in Europe. There will be a two-year transition period as of 2026 to adapt to this regulation.

EU proposals require filling out an extensive questionnaire as an annex on ethical aspects, which already included the trustworthy usage of AI. This questionnaire is regularly updated, increasing the number of questions and details related to AI following the new EU AI act regulations. While the usage of AI is already evaluated, if present during the review process of proposals selected for funding by the EU, future projects can

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be audited at any time during their execution period, challenging compliance with both legal and ethical requirements of AI, risking being put on hold or even stopped if they do not comply. The Belgian Association of Research Managers and Administrators of European-funded projects (Be-Arma) provided an online training on compliance with AI & ethics in Horizon Europe.

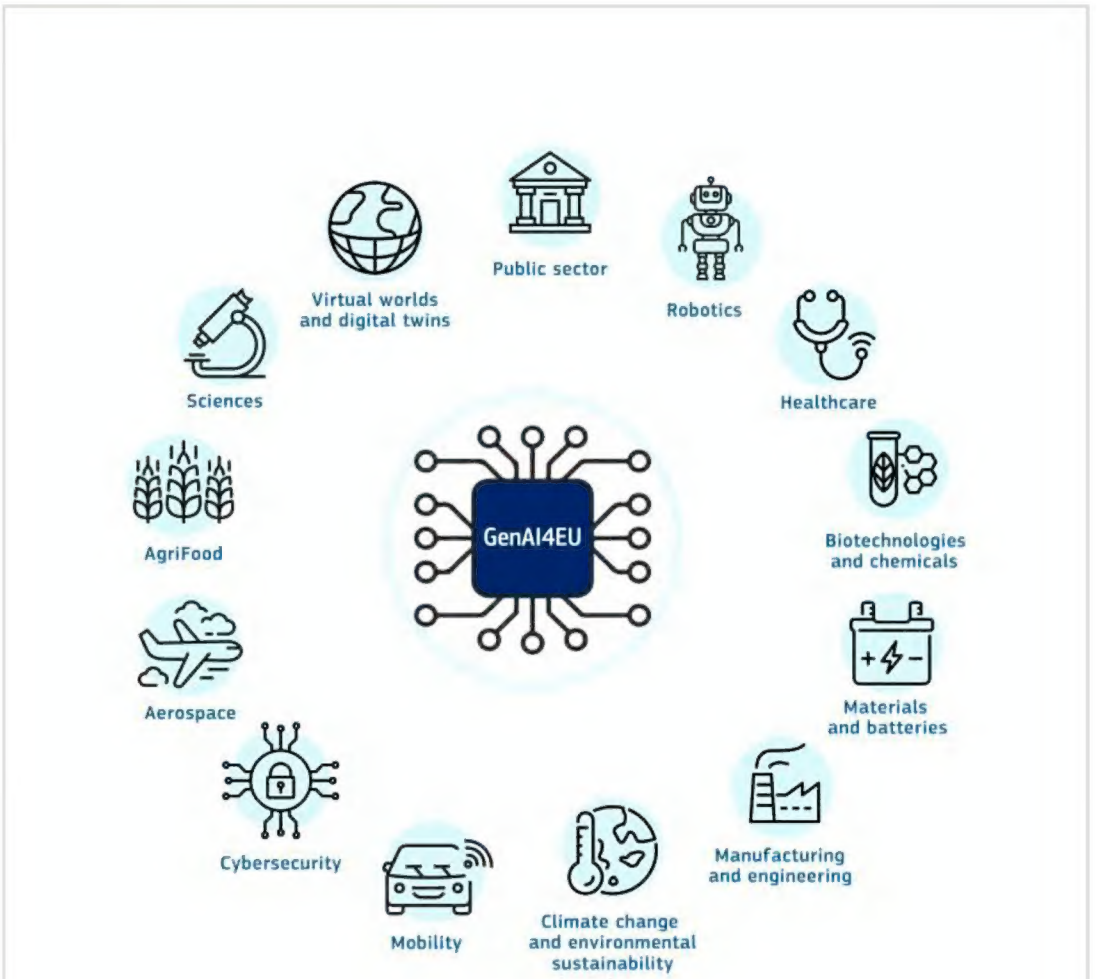

Figure 1.

The GenAI4EU initiative will contribute to the development of novel use cases and emerging applications in Europe's 14 industrial ecosystems, as well as the public sector. GenAI4EU, European Commission, CC-BY 4.0

Current discussions at the EU level are on how they can remain competitive in AI, compared to other countries where fewer legal or ethical barriers exist. While judged essential, there are no doubts that such regulations slow down the development and implementation processes, as largely addressed during the conference, Research to Reality: Digital Solutions to European Challenges, held during the Belgian EU Presidency. The balance between open collaboration and free sharing of data and knowledge are challenged by concerns about so called strategic autonomy (European Commission et al. 2024) and competitiveness. These concepts were pushed even further in the EU conference: Research Infrastructures in a Changing Global, Environmental and Socio-economical Context, where the current critical geo-political context was linked to a need for even more strategic autonomy in Europe, where AI and other digital solutions were explicitly mentioned.

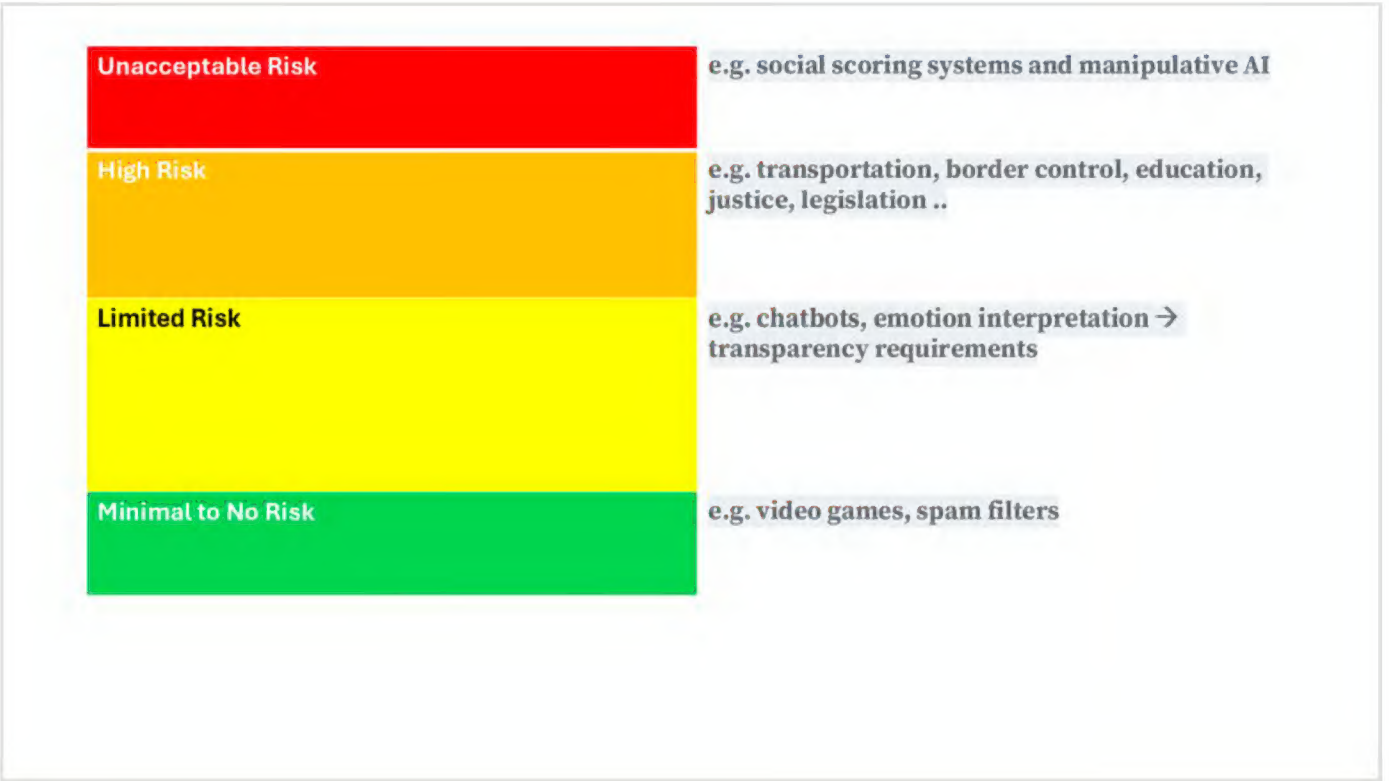
Unacceptable Risk
e.g. social scoring systems and manipulative AI
High Risk
e.g. transportation, border control, education, justice, legislation ..
Limited Risk
e.g. chatbots, emotion interpretation → transparency requirements
Minimal to No Risk
e.g. video games, spam filters

Figure 2.

AI systems are classified into four risk categories (unacceptable, high, limited, minimal to no risk) with corresponding regulations. Based on the information provided by the European Commission (Future of Life Institute 2024)

As an introduction to this session, this talk will go to the best of our knowledge over these new EU AI Act requirements and how it may affect future AI-linked activities in our natural sciences domain, including how they may affect the funding of our information technology activities.

Keywords

AI act, legal, ethical, EU regulation, biodiversity informatics

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Conflicts of interest

The authors have declared that no competing interests exist.

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